

Meeting Notes
Buildings Work Group #3
October 26, 2007
City-County Building Rm. 662

Attendees:

- Madeleine Weil, City
- Patrick Hughes, ORNL
- Pat Mulligan, QE²
- Tim Dimick, SACE
- Brandon Blevins, SACE
- David Reister, Sierra Club
- Elizabeth Eason, USGBC
- Gary Norman, City
- Jeff Galyon, PBA
- Susan Edwards, KUB
- Dick Kelso, ASHRAE
- Greg Farmer, ASPE

Building practices compilation distributed

Discussion of work group member-submitted proposals

Knoxville-Wide Housing Energy Efficiency Program – presented by Patrick Hughes, Oak Ridge National Laboratory

- Apply weatherization techniques to obtain cost-effective energy savings. Savings ~25%, costs \$2K-4K per household. Simple payback ~8 years or less.
- Could start with low-income, single-family and expand to all city houses. Cost-sharing component.
- After inspection, weatherization measures could be implemented at once or over time, when regular repairs are needed. Home-owner education component.
- Who would the inspectors be? CAC's do low-income now. There is currently no commercial demand for inspections, so few certified inspectors. SACE is trying to set up a certification program locally.
- Financing would be key – TVA potentially a source of funding. Joe Hoagland is interested in building TVA's efficiency programs, but has not yet decided which route to take. 1995 TVA plan includes several options at the commercial and residential level for <5cents/kWh.
- Education and PR would be important elements – publicize availability of program.
- The County is already doing some of this for low-income homes through PBA. This infrastructure could support expansion. If HUD money can be used, could happen quickly.
- Low-interest financing would need to be the carrot.
- Possible project team for next steps: Pat Hughes, Madeline Rogero, Jeff Galyon, Susan Edwards, Joe Hoagland, Tim Dimick, County Community Development, banks, CACs, local contractors, HERS raters, TVA.

Preview of LEED program for municipal buildings – presented by Beth Eason, USGBC and Elizabeth Eason Architecture

- >100 cities and counties now require LEED certification for new government buildings (plus many universities, including UT, and federal agencies).

- Nashville requires LEED silver for municipal buildings >5,000 sq-ft or >\$2 mill project cost. Private developments can get density bonus for LEED certification.
- Comparison of similar cities to Knoxville will be provided.
- Could be accomplished by amending city & county building specifications.
- LEED for homes is under development but not available yet.
- Possible project team for next steps: Beth Eason, Jeff Galyon, UT School of Architecture.

Integrated Building Systems Maintenance and Training Program – presented by Pat Mulligan, Quantum Environmental & Engineering Services, LLC

- LEED for existing buildings provides template for integrated building maintenance, whether or not official LEED for existing policy is adopted. Proactive maintenance and management reduces failures.
- Would begin with a systems inventory and evaluation, implementation through existing staff. Develop a checklist - when you replace, you replace smarter.
- Return on sustainable buildings up to factor of 10, depending on how you value various benefits. Upfront costs would include labor, but could be done with existing staff.
- Could potentially be added to the Energy Services RFP or amended into PBA's policies and procedures.
- LEED certification for a new building is one thing, but regular checks needed to maintain performance. Potential to lose benefits over time without sound management strategy.
- Limited maintenance budgets are challenges. There are paybacks to energy upgrades, but politicians see savings and use them for something else. Savings need to be rolled back into maintenance and to produce additional savings.
- COK should consider having a facilities manager to coordinate Energy Services Contract and sustainable building systems over time.
- Possible project team for next steps: Pat Mulligan, Jeff Galyon, City

Preview of Green Power Switch for Downtown Knoxville – presented by Brandon Blevins and Tim Dimick, SACE

- Green Power Switch – probably bigger market out there for voluntary green power purchases (now only 1%).
- Proposal to market specifically to businesses in Downtown Knoxville.
- Create Awards program to recognize businesses that purchase green power – Platinum, Silver and Bronze awards based on percentage or amount purchased.
- TVA/KUB involvement – possibly installed solar capacity as prize for getting to a certain level. Local investments for Generation Partners Program.
- Related idea - Knoxville / Chattanooga friendly competition for signing up customers to Green Power Switch – solar panels as prize.
- Possible project team for next steps: SACE, Chamber, KUB, TVA

Other Discussion

- International Energy Code adoption this year – inspection will be key and resources are limited.
 - DOE software (free) – Commcheck EZ – builders fill out form and submit with building plans. Probably 20% of municipalities require this. Inspectors can just check to make sure they have the form, rather than performing the actual inspection. Available for commercial buildings, maybe residential.
- ORNL Solar Summit. Solar Cities grant through DOE provides technical and financial assistance for integrating solar installations into planning and zoning. Good opportunity for Knoxville – DOE looking for a city in the Southeast.

Next Meeting: Friday, November 16th, 1:30-3:00, Room 662, City-County Building.